

## **Appendix A**

### **Culvert Management System**

for the

### **West Virginia Parkways Authority**

#### **Screenshots and definitions of system design.**

This appendix describes Parkway's desired Culvert Management System by illustrating the system map and screens to be developed. Parkway strongly desires that the system be designed exactly as shown on the screens; however, during the configuration effort Parkway will consider vendor recommendations for additions or changes to the screens shown herein.

## System Map

1.	Start Page
2.	Asset Lookup
2.1.	Lookup Asset by GPS
2.2.	Lookup Asset by Barcode/ID
2.3.	Lookup Asset by Station Mark
2.4.	List of Nearby Assets
3.	Asset Information
3.1.	Asset Details/Inventory
3.2.	Asset Work History
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3.3.	Asset Inspection History
3.3.1.	Asset Inspection History Detail
3.4.	Asset Work Orders
3.6.	Edit Asset Info
3.7.	Add an Asset
4.	New Inspections
4.1.	Culvert Inspection
4.1.1.	Culvert Inlet Ditch Inspection
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4.1.3.	Culvert Inlet Headwall Inspection
4.1.4.	Culvert Barrel Inspection
4.1.5.	Culvert Outlet Headwall Inspection
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4.1.7.	Embankment
4.2.	Drop Inlet Inspection
4.2.1.	DI Concrete Structure Inspection
4.2.2.	DI Grate Inspection
4.2.3.	DI Sediment
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4.3.	Recent Inspections
5.	Work Orders
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5.2.	Mark Work Order Complete
5.2.1.	Inspection Needed?
5.3.	Create Work Order
5.3.1.	Edit Work Order
6.	Work Reporting

## 1. Start Page

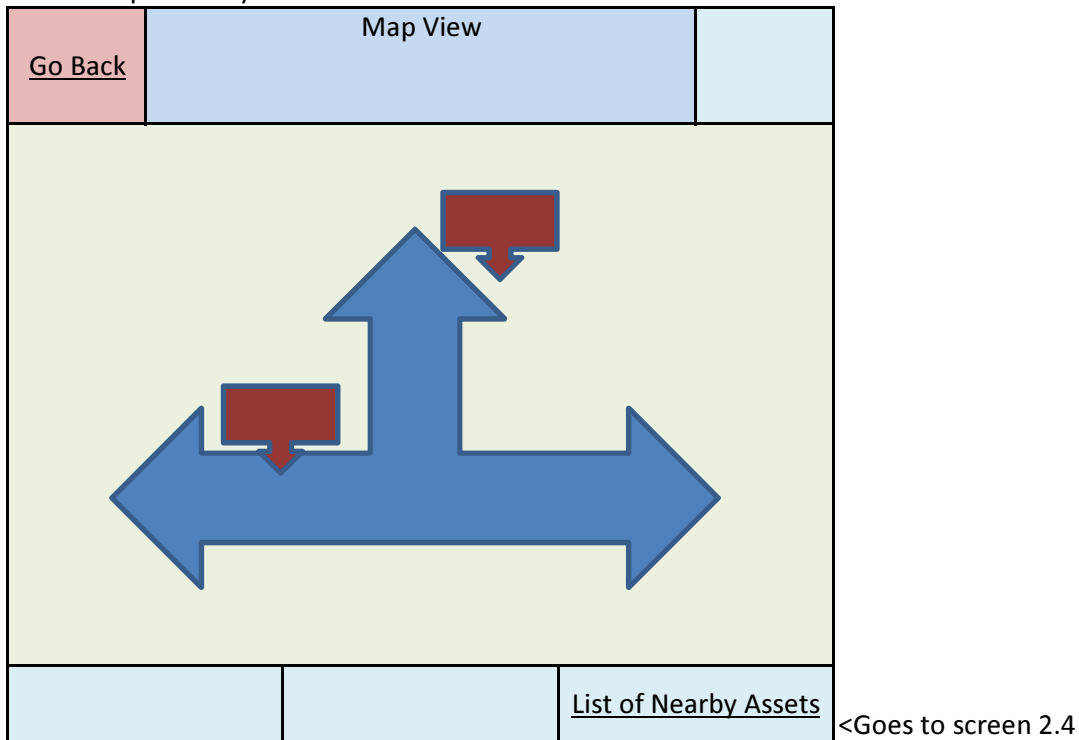
WV Parkways Authority Culvert Management System	
<u>Lookup Asset by GPS</u>	<Goes to screen 2.1
<u>Lookup Asset by Barcode/ID</u>	<Goes to screen 2.2
<u>Lookup Asset by Station Mark</u>	<Goes to screen 2.3
<u>Add an Asset</u>	<Goes to screen 3.7
<u>Recent Inspections</u>	<Goes to screen 4.4
<u>View Open Work Order</u>	<Goes to screen 5.1
Log Out	<Logs the user out of the system

This is the screen users will see when logging onto the mobile software.

Users shall be able to click on an Application icon on their device to load directly to this screen.

Many screens in the system will have a "Go Back" button in the top left corner. This button shall always take the user to the page they were previously on.

## 2.1 Lookup Asset by GPS



This screen will allow selection of drainage asset based on GPS in a map view.

This screen shall be of a "Google" or equivalent map.

The radius or scale of the viewing area of the map shall be shown on the screen.

The screen shall have zoom capabilities either by screen touch or other.

Overlaid on the map shall be markers of the drainage assets.

These assets shall be displayed in a location determined by their GPS coordinates.

The markers for the assets shown on the map shall be clickable.

Clicking on these markers will take you to screen 3 for the asset selected.

Optionally the assets may be color coded by type.

## 2.2 Lookup Asset by Barcode/ID

<u>Go Back</u>	Scan Barcode/ID	
	Scan Barcode	
	Scan	<u>Done</u>
Full Keyboard for typed entry. Include speech to text.		

This screen will allow selection of drainage asset based on Barcode or ID.

A full keyboard shall be provided on the bottom portion of the screen.

Users shall either be able to click on the "Scan" button to Scan a barcode or type in the asset's ID into the keyboard.

A speech to text option shall also be included to enter the asset's ID.

Scanning the barcode or clicking on "Done" shall take the user to screen 3 for the asset identified.

### 2.3 Lookup Asset by Station Mark

<a href="#">Go Back</a>	Lookup Asset by Station Mark
	Enter Station Marker
<a href="#">Done</a>	
Full Keyboard for typed entry. Include speech to text.	





This screen will allow selection of drainage asset based on Station Marker.

A full keyboard shall be provided on the bottom portion of the screen.

A speech to text option shall also be included to enter the asset's ID.

Clicking on "Done" shall take the user to screen 3 for the asset identified.

## 2.4 List of Nearby Assets

<a href="#">Go Back</a>	Nearby Assets		
D10135	Station		
Drop Inlet	1606+00		
36" x 85'			
D10234	Station		
Pipe Outfall	1890+50		
18" x 105'			
D10521	Station		
Drop Inlet	1955+00		
18" x 295'			
D10641	Station		
Drop Inlet	1992+00		
18" x 45'			

This screen will allow selection of drainage asset based on GPS in a list view.


This screen shall be of a list of assets near the user based on a selected radius.  
The radius area of the map shall be shown at the top of the screen.

These assets shall be displayed with the closest on top based on GPS coordinates.

Each asset shall be listed with details including: ID, Type, Size, Station, and a picture.

Clicking the asset's row will take you to screen 3 for the asset selected.

### 3 Asset Information

<a href="#">Go Back</a>	Asset Information	<a href="#">Edit Asset</a>	< Goes to screen 3.6
	D10135	<a href="#">Info</a>	
Drop Inlet		Station 1606+00 	
<a href="#">Asset Details/Information</a>			< Goes to screen 3.1
<a href="#">Asset Work History</a>			< Goes to screen 3.2
<a href="#">Asset Inspection History</a>			< Goes to screen 3.3
<a href="#">Asset Work Orders</a>			< Goes to screen 3.4
<a href="#">Create Work Report</a>	<a href="#">Create Work Order</a>	<a href="#">Create Inspection</a>	

^ Goes to screen 6

^ Goes to screen 5.3

^ Goes to an inspection screen.

4.1.1 for Culverts

4.2.1 for Drop Inlets

This screen is the default screen for all asset information. When selecting an asset from another view it will take you to this screen.

The bottom section of most of the 3.x screens will have the same 3 buttons. These buttons will provide consistency across the platform.

Clicking on the Create Work Report button takes you to the Work Reporting screen (6) It will provide the screen with the ID of the asset so that any work reported will be connected to the asset.

Clicking on the Create Work Order button takes you to the Work Order screen (5.3) It will provide the screen with the ID of the asset so that any created work order will be connected to the asset.

Clicking on the Create Inspection button takes you to the correct Inspection screen. The system shall know whether the asset is a Culvert or Drop inlet and will take the user to the correct screen to complete the inspection. 4.1.1 for Culverts or 4.2.1 for Drop Inlets.

The main section of this particular screen will have the asset ID at the top. It will include the type of asset this is, the station marker, and a picture of the asset.

Under that will be links to other detailed reports on this asset. These links will include: Detail, Work History, Inspection History, Work Orders, and Pictures.

### 3.1 Asset Details/Inventory

<a href="#">Go Back</a>	Asset Details/Information	<a href="#">Edit Asset</a>																				
	D10135	<a href="#">Info</a>																				
<div>&lt; Goes to screen 3.6</div> <table><tr><td>Type</td><td>Drop Inlet</td></tr><tr><td>Station</td><td>1606+00</td></tr><tr><td>Location</td><td>NBL 68' Right BL</td></tr><tr><td>Pipe Size</td><td>36"</td></tr><tr><td>Pipe Length</td><td>85'</td></tr><tr><td>Pipe Type</td><td>RCP</td></tr><tr><td>PI or NPI</td><td></td></tr><tr><td>Last Rating</td><td>1</td></tr><tr><td>Date</td><td>41256</td></tr><tr><td>Open WO</td><td>0</td></tr></table>			Type	Drop Inlet	Station	1606+00	Location	NBL 68' Right BL	Pipe Size	36"	Pipe Length	85'	Pipe Type	RCP	PI or NPI		Last Rating	1	Date	41256	Open WO	0
Type	Drop Inlet																					
Station	1606+00																					
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Pipe Size	36"																					
Pipe Length	85'																					
Pipe Type	RCP																					
PI or NPI																						
Last Rating	1																					
Date	41256																					
Open WO	0																					
<a href="#">Create Work Report</a>	<a href="#">Create Work Order</a>	<a href="#">Create Inspection</a>																				

This screen provides the details of the drainage asset.

The screen would include data from the database such as:  
ID, Type, Station, Location, Size, Length, Pipe Type, PI or NPI.

This screen could also show information such as the last rating the asset received  
and how many open Work Orders the asset has.

### 3.2 Asset Work History

<a href="#">Go Back</a>	Asset Work History	
	D10135	
<a href="#">4/8/2014</a>	<a href="#">Culvert Cleaning</a>	< Goes to screen 3.2.1
4/8/2014	Culvert Camera	
6/8/2013	Brush Cleared	
3/8/2012	Culvert Repaired	
<a href="#">Create Work Report</a>	<a href="#">Create Work Order</a>	<a href="#">Create Inspection</a>


This screen will show the work history corresponding to the selected asset.

All past work history shall be listed here showing the data the work was completed along with what work was done.

Clicking on one of the Work History rows will take you to the detail view for that line.  
(Screen 3.2.1)

The Work History shall be listed with the newest items at the top of the screen.

### 3.2.1 Asset Work History Details

<a href="#">Go Back</a>	Asset Work History	
	D10135	
4/8/2014	Culvert Cleaning	
Notes: Culvert was cleaned using...		
		
<a href="#">Create Work Report</a>	<a href="#">Create Work Order</a>	<a href="#">Create Inspection</a>

This screen will provide a detailed view of the Work History selected on the previous screen (3.2).

This screen will show the date work was completed, what work was accomplished, any notes that were reported, and pictures that were taken.

### 3.3 Asset Inspection History

<a href="#">Go Back</a>	Asset Inspection History			
	D10135			
Date	Element	Rating	Flag	Inspector
12/13/12	<a href="#">Inlet Ditch</a>	<a href="#">1</a>		<a href="#">GSD</a>
	<a href="#">Inlet Headwall</a>	<a href="#">3</a>		
	<a href="#">Culvert</a>	<a href="#">1</a>		
	<a href="#">Invert</a>	<a href="#">3</a>		
	<a href="#">Outlet Headwall</a>	<a href="#">2</a>		
	<a href="#">Outlet Ditch</a>	<a href="#">1</a>		
11/15/10	Inlet Ditch	2		PK
	Inlet Headwall	3		
	Culvert	2		
	Invert	3		
	Outlet Headwall	3		
	Outlet Ditch	2		
<a href="#">Create Work Report</a>		<a href="#">Create Work Order</a>		<a href="#">Create Inspection</a>

< Goes to screen 3.3.1

This screen will show the inspection history of the selected asset.

The top of the screen shall indicate the ID of the asset the user is reviewing.




Each inspection will be listed with the newest first.

Each line will show each of the graded elements of the asset along with the lowest rating that element received in the inspection. Elements that were flagged shall also display that information here.

Inspector initials shall be included on the line with each inspection.

Each of these inspections shall be clickable to go into an inspection details screen (3.3.1)

### 3.3.1 Asset Inspection History Detail

<a href="#">Go Back</a>	Asset Inspection History		Inspector
	D10135		GSD 12/13/12
Element	Rating	Flag	
<b>Inlet Ditch</b>			
Heavy Silt Build Up	2		
Heavy Brush	3		
Wash Out	1		
<hr/>			
<b>Inlet Headwall</b>			
Heavy Deterioration	3		
Cracking	3		
Separation	3		
<hr/>			
<b>Culvert</b>			
Heavy Corrosion	2		
Section Loss	1		
Video Req?	1		

This screen will show the detail of the selected inspection report.

The top of the screen shall show the ID of the asset the user is reviewing.




The initials of the inspector and the date of the inspection shall also be indicated.

Each element of the inspection shall have it's own section.

In those sections the condition that was rated shall be shown along with the rating it received and a flag if the condition was flagged.

If a picture was taken for the element that shall be shown in this section as well.

### 3.4 Asset Work Orders

<a href="#">Go Back</a>	Asset Work Orders	
	D10135	
12/13/12 GSD	<u>Inlet Ditch Washout</u> Additional Directions...	 Parkways
12/13/12 GSD	Culvert Section Loss Additional Directions...	 Contractor
12/13/12 GSD	Culvert Video Recording Additional Directions...	 Parkways
11/15/10 PK	Medium Silt Buildup Additional Directions...	HNTB
<a href="#">Create Work Report</a>	<a href="#">Create Work Order</a>	<a href="#">Create Inspection</a>

This screen will show a list of all active Work Orders for the selected asset.

The screen shall show the ID of the asset the user is currently viewing.

Each Work Order shall be listed with the newest listed at the top of the screen.

The section for each Work Order shall show the date it was added, the initials of the inspector that created the Work Order, the issue, any additional directions provided, and a flag if the Work Order was flagged as priority. Under the Flag it will list who the Work Order is assigned to.

Clicking on one of the Work Orders will ask the user if the system shall mark the Work Order as complete. (Screen 5.2)

### 3.6 Edit Asset Info

<a href="#">Go Back</a>	Edit Asset Details/Information		<a href="#">Asset Details</a> < Goes to screen 3														
	D10135																
<table><tr><td>Type</td><td>Drop Inlet</td></tr><tr><td>Station</td><td>1606+00</td></tr><tr><td>Location</td><td>NBL 68' Right BL</td></tr><tr><td>Pipe Size</td><td>36"</td></tr><tr><td>Pipe Length</td><td>85'</td></tr><tr><td>Pipe Type</td><td>RCP</td></tr><tr><td>PI or NPI</td><td></td></tr></table>				Type	Drop Inlet	Station	1606+00	Location	NBL 68' Right BL	Pipe Size	36"	Pipe Length	85'	Pipe Type	RCP	PI or NPI	
Type	Drop Inlet																
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PI or NPI																	
<table><tr><td><a href="#">Create Work Report</a></td><td><a href="#">Create Work Order</a></td><td><a href="#">Create Inspection</a></td></tr></table>				<a href="#">Create Work Report</a>	<a href="#">Create Work Order</a>	<a href="#">Create Inspection</a>											
<a href="#">Create Work Report</a>	<a href="#">Create Work Order</a>	<a href="#">Create Inspection</a>															

This screen allows the editing of the information in the database corresponding to the selected asset.

The selected asset shall be listed at the top of the screen.

All informational fields in the database shall be listed here.

Clicking on the current data (light blue boxes) shall open up a keyboard and allow the user to change the information that is in that field.

Clicking any button to leave this page shall save the newly entered data.

### 3.7 Add an Asset

<u>Go Back</u>	Add Asset	
ID/Barcode <input type="text"/>		
Type <input type="text"/>		
Station Location <input type="text"/>		
Pipe Size <input type="text"/>		
Pipe Length <input type="text"/>		
Pipe Type <input type="text"/>		
PI or NPI <input type="text"/>		
Lat <input type="text"/>		
Long <input type="text"/>		
	Retrieve GPS Location	<u>Save</u>

This screen allows the addition of assets into the system.

Clicking on the "Retrieve GPS Location" button will populate the "Lat" and "Long" fields with the data from the GPS provided by the handheld.

All fields from the system shall be listed here with the option to enter data for the newly created asset.

The fields ID/Barcode, Type, Location, Lat, and Long shall be required before the user can hit the "Save" button.

#### 4.1.1 Culvert Inlet Ditch Inspection

<a href="#">Go Back</a>	Culvert Inspection	
	D10135	
Inlet Ditch		
Sediment Build Up (1)	Sediment Build Up (2)	Sediment Build Up (3)
Brush Build Up (1)	Brush Build Up (2)	Brush Build Up (3)
Ditch Erosion (1)	Ditch Erosion (2)	Ditch Erosion (3)
	Take Photo	<a href="#">Next Element</a>

< Goes to screen 4.1.2

This screen will start the inspection process for any asset with the type "Culvert"

The process will start with the Element of "Inlet Ditch".

Inlet Ditch will have 3 Conditions that will be rated.

Those 3 conditions are: Sediment Build Up, Brush Build Up, and Ditch Erosion.

Each of the conditions shall have a box associated with each possible condition rating. Clicking on the condition rating will highlight that box. The user can change which boxes are highlighted but, only 1 box can be highlighted for each row.

Clicking on "Take Photo" shall allow the user to take a picture of the element the user is currently inspecting.

If one of the conditions has been rated as a "1" the user shall be required to take a picture of the element before continuing with the inspection.

Clicking on "Next Element" will take the user to the next screen in the inspection process. (4.1.2 in this case)

#### 4.1.2 Culvert Paved/Rock Gutter Inspection

<a href="#">Go Back</a>	Culvert Inspection		
	D10135		
Paved/Rock Gutter			
Paved/Rock Gutter (1)		Paved/Rock Gutter (3)	
Previous Element	Take Photo	Next Element	

< Goes to screen 4.1.3

^ goes to screen 4.1.1

The next element of the Culvert inspection will be "Paved/Rock Gutter".

Paved/Rock Gutter will have 1 Condition that will be rated.

That 1 condition only has 2 options available to the user. (1 or 3)

Clicking on "Take Photo" shall allow the user to take a picture of the element the user is currently inspecting.

If one of the conditions has been rated as a "1" the user shall be required to take a picture of the element before continuing with the inspection.

Clicking on "Next Element" will take the user to the next screen in the inspection process. (4.1.3 in this case)

#### 4.1.3 Culvert Inlet Headwall Inspection

<a href="#">Go Back</a>	Culvert Inspection		
	D10135		
Inlet Headwall			
Spalling, Deterioration, and Cracking (1)	Spalling, Deterioration, and Cracking (2)	Spalling, Deterioration, and Cracking (3)	
Separation (1)	Separation (2)	Separation (3)	
Previous Element	Take Photo	Next Element	

< Goes to screen 4.1.4

^ goes to screen 4.1.2

The next element of the Culvert inspection will be "Inlet Headwall".

Inlet Headwall will have 2 Conditions that will be rated.

Those 2 conditions are: Spalling, Deterioration, and Cracking and Separation.

Clicking on "Take Photo" shall allow the user to take a picture of the element the user is currently inspecting.

If one of the conditions has been rated as a "1" the user shall be required to take a picture of the element before continuing with the inspection.

Clicking on "Next Element" will take the user to the next screen in the inspection process. (4.1.4 in this case)

#### 4.1.4 Culvert Barrel Inspection

<u>Go Back</u>	Culvert Inspection		
	D10135		
Culvert Barrel			
Structure (1)	Structure (2)	Structure (3)	
Blockage (1)	Blockage (2)	Blockage (3)	
Previous Element	Take Photo	Next Element	

< Goes to screen 4.1.5

^ goes to screen 4.1.3

The next element of the Culvert inspection will be "Culvert Barrel".

Culvert Barrel will have 2 Conditions that will be rated.  
Those 2 conditions are: Structure and Blockage.

Clicking on "Take Photo" shall allow the user to take a picture of the element  
the user is currently inspecting.

If one of the conditions has been rated as a "1" the user shall be required  
to take a picture of the element before continuing with the inspection.

Clicking on "Next Element" will take the user to the next screen in the  
inspection process. (4.1.5 in this case)

#### 4.1.5 Culvert Outlet Headwall

<a href="#">Go Back</a>	Culvert Inspection		
	D10135		
Outlet Headwall			
Spalling, Deterioration, and Cracking (1)	Spalling, Deterioration, and Cracking (2)	Spalling, Deterioration, and Cracking (3)	
Separation (1)	Separation (2)	Separation (3)	
Previous Element	Take Photo	Next Element	

< Goes to screen 4.1.6

^ goes to screen 4.1.4

The next element of the Culvert inspection will be "Outlet Headwall".

Outlet Headwall will have 2 Conditions that will be rated.

Those 2 conditions are: Spalling, Deterioration, and Cracking and Separation.

Clicking on "Take Photo" shall allow the user to take a picture of the element the user is currently inspecting.

If one of the conditions has been rated as a "1" the user shall be required to take a picture of the element before continuing with the inspection.

Clicking on "Next Element" will take the user to the next screen in the inspection process. (4.1.6 in this case)

#### 4.1.6 Culvert Outlet Ditch

<a href="#">Go Back</a>	Culvert Inspection	
	D10135	
Outlet Ditch		
Sediment Build Up (1)	Sediment Build Up (2)	Sediment Build Up (3)
Brush Build Up (1)	Brush Build Up (2)	Brush Build Up (3)
Ditch Erosion (1)	Ditch Erosion (2)	Ditch Erosion (3)
Previous Element	Take Photo	Next Element

< Goes to screen 4.1.7

^ goes to screen 4.1.5

The next element of the Culvert inspection will be "Outlet Ditch".

Outlet Ditch will have 3 Conditions that will be rated.

Those 3 conditions are: Sediment Build Up, Brush Build Up, and Ditch Erosion.

Clicking on "Take Photo" shall allow the user to take a picture of the element the user is currently inspecting.

If one of the conditions has been rated as a "1" the user shall be required to take a picture of the element before continuing with the inspection.

Clicking on "Next Element" will take the user to the next screen in the inspection process. (4.1.7 in this case)

#### 4.1.7 Culvert Embankment

<u>Go Back</u>	Culvert Inspection		
	D10135		
Embankment			
Embankment Erosion (1)	Embankment Erosion (2)	Embankment Erosion (3)	
Previous Element	Take Photo	Finish Inspection	

^ goes to screen 4.1.6

< Completes Inspection  
Returns user to screen 3.

The next element of the Culvert inspection will be "Embankment".

Embankment will have 1 Condition that will be rated.

Those 3 conditions are: Sediment Build Up, Brush Build Up, and Ditch Erosion.

Clicking on "Take Photo" shall allow the user to take a picture of the element the user is currently inspecting.

If one of the conditions has been rated as a "1" the user shall be required to take a picture of the element before continuing with the inspection.

Clicking on "Finish Inspection" will ask for the inspector's initials and save the inspection to the system. Then it will return the user to the asset information screen for the asset they completed (screen 3).

#### 4.2.1 Drop Inlet Concrete Structure Inspection

<a href="#">Go Back</a>	Drop Inlet Inspection		
	D10135		
Concrete Structure			
Spalling and Deterioration (1)	Spalling and Deterioration (2)	Spalling and Deterioration (3)	
	Take Photo	Next Element	

< Goes to screen 4.2.2

This screen will start the inspection process for any asset with the type "Drop Inlet"

The process will start with the Element of "Concrete Structure".

Inlet Ditch will have 1 Condition that will be rated.

That condition is the level of Spalling and Deterioration.

Each of the conditions shall have a box associated with each possible condition rating. Clicking on the condition rating will highlight that box. The user can change which boxes are highlighted but, only 1 box can be highlighted for each row.

Clicking on "Take Photo" shall allow the user to take a picture of the element the user is currently inspecting.

If one of the conditions has been rated as a "1" the user shall be required to take a picture of the element before continuing with the inspection.

Clicking on "Next Element" will take the user to the next screen in the inspection process. (4.2.2 in this case)

#### 4.2.2 Drop Inlet Grate

<a href="#">Go Back</a>	Drop Inlet Inspection		
	D10135		
Grate			
Grate (1)	Grate (2)	Grate (3)	
Previous Element	Take Photo	Next Element	

< Goes to screen 4.2.3

^ goes to screen 4.2.1

The next element of the Drop Inlet inspection will be "Grate".

Grate will have 1 Condition that will be rated.

That is the condition of the Grate.

Clicking on "Take Photo" shall allow the user to take a picture of the element the user is currently inspecting.

If one of the conditions has been rated as a "1" the user shall be required to take a picture of the element before continuing with the inspection.

Clicking on "Next Element" will take the user to the next screen in the inspection process. (4.2.3 in this case)

#### 4.2.3 Drop Inlet Sediment

<a href="#">Go Back</a>	Drop Inlet Inspection		
	D10135		
Sediment			
Sediment (1)	Sediment (2)	Sediment (3)	
Previous Element	Take Photo	Next Element	

< Goes to screen 4.2.4

^ goes to screen 4.2.2

The next element of the Drop Inlet inspection will be "Sediment".

Sediment will have 1 Condition that will be rated.  
That is the level of Sediment.

Clicking on "Take Photo" shall allow the user to take a picture of the element  
the user is currently inspecting.

If one of the conditions has been rated as a "1" the user shall be required  
to take a picture of the element before continuing with the inspection.

Clicking on "Next Element" will take the user to the next screen in the  
inspection process. (4.2.4 in this case)

#### 4.2.4 Drop Inlet Paved/Rock Gutter

<u>Go Back</u>	Drop Inlet Inspection	
	D10135	
Paved/Rock Gutter		
Paved/Rock Gutter (1)		Paved/Rock Gutter (3)
Previous Element	Take Photo	Finish Inspection

^ goes to screen 4.2.3

< Completes Inspection  
Returns user to screen 3.

The last element of the Drop Inlet inspection will be "Paved/Rock Gutter".

Paved/Rock Gutter will have 1 Condition that will be rated.  
That 1 condition only has 2 options available to the user. (1 or 3)

Clicking on "Take Photo" shall allow the user to take a picture of the element the user is currently inspecting.

If one of the conditions has been rated as a "1" the user shall be required to take a picture of the element before continuing with the inspection.

Clicking on "Finish Inspection" will ask for the inspector's initials and save the inspection to the system. Then it will return the user to the asset information screen for the asset they completed (screen 3).

#### 4.4 Recent Inspections

<a href="#">Go Back</a>	Recent Inspections		
ID	Type	Latest Rating	Flag
D10135 5/13/14	Drop Inlet 36"x85"	4	
D10153 4/12/14	Culvert 36"x110"	2	
D10250 3/14/14	Drop Inlet 36"x85"	5	
D12851 12/13/13	Drop Inlet 36"x85"	3	
D12253 12/13/12	Drop Inlet 36"x85"	1	
D12287 12/13/12	Drop Inlet 36"x85"	2	
D12271 10/8/11	Drop Inlet 36"x85"	2	

This screen will show a list of the most recent inspections.

The list will show the ID, Type, and size of the inspected asset along with the date of the inspection, the overall rating of that inspection, and a flag if the asset was flagged.

The list shall be ordered with the most recent inspection on the top.

Clicking on one of the listed inspections will take you to the detailed inspection report for that inspection (screen 3.3.1)

The last 20 Inspections shall be listed.

### 5.1 View Open Work Orders

<a href="#">Go Back</a>	Asset Work Orders		
	All Open Work Orders		
ID	Type	No of Wos	Flag
D10135 1606+00	Drop Inlet 36"x85"	4	
D10153 1406+00	Culvert 36"x110"	2	
D10250 1375+00	Drop Inlet 36"x85"	5	
D12851 1250+00	Drop Inlet 36"x85"	3	
D12253 1500+00	Drop Inlet 36"x85"	1	
D12287 1400+00	Drop Inlet 36"x85"	2	
D12271 1300+00	Drop Inlet 36"x85"	2	

This screen will show a list of all open work orders in the system.

The list will show the ID, Type, station mark, and size of the inspected asset along with the number of Work Orders assigned to that asset and a flag if one of the work orders was flagged as important.

Clicking on an item in this list will take you to the asset work order screen (3.4).

## 5.2 Mark Work Order Complete

<u>Go Back</u>	Asset Work Order	
	D10135	
12/13/12 GSD	Inlet Ditch Washout Additional Directions...	
Would you like to mark this Work Order as Completed?		
<u>Yes</u>	Edit Work Order	<u>No</u>

This is the screen a user shall see after clicking on a Work Order from screen 3.4

Clicking on Yes will mark the Work Order as complete in the system and remove it from screen 3.4.

Clicking Yes will also take the user to the dialog box on screen 5.2.1.

Clicking No will not make any changes to the system and take the user back to screen 3.4.

### 5.2.1 Inspection Needed?

<u>Go Back</u>	Asset Work Order	
	D10135	
12/13/12 GSD	Inlet Ditch Washout Additional Directions...	
The above Work Order has been marked as completed. Would you like to perform a new inspection for D10135?		
<u>Yes</u>		<u>No</u>

This is the screen a user shall see after clicking on a Yes on screen 5.2.

If the user selects Yes to performing a new inspection it will take the user to the correct inspection screen (either 4.1.1 for Culvert or 4.2.1 for Drop Inlet).

Clicking No will return the user to screen 3.4 with any additional Work Orders still listed.

### 5.3 Create Work Order

<a href="#">Go Back</a>	Create Work Order	
	D10135	
<u>Date:</u> 12/13/12	<u>Issue:</u> Drop Down List of possible Problems.	<u>Flag:</u> <div></div>
<u>Inspector:</u> GSD	<u>Additional Directions:</u> Manually key in any additional directions.	
<u>Assigned To:</u> Parkways		
Add additional Work Order	Take Photo	<a href="#">Finished</a>

This screen will allow users to create work orders in the system.

The date shall be auto populated.

Clicking in the Issue field will give a drop down list of items we have defined as possible issues that can be listed here.

Clicking in the Flag field will turn the flag on or off.

Clicking in the Inspector field will allow the inspector to add their initials.

Clicking in the Additional Directions field will allow the user to add any additional specific directions they would like to add to the Work Order.

Clicking in the Assigned To: field will give options for the user to select.

These options will be Parkways, HNTB, and Contractor. These may need updated in the future.

The Add Additional Work Order button will save the current Work Order and begin a new one.

The Take Photo button will allow the inspector to take a photo and attach it to this Work Order.

The Finished button will save the current Work Order and take the user to screen 3.4.

### 5.3.1 Edit Work Order

<a href="#">Go Back</a>	Edit Work Order		
	D10135		
<u>Date:</u> 12/13/12	<u>Issue:</u> Drop Down List of possible Problems.	<u>Flag:</u>	
<u>Inspector:</u> GSD	<u>Additional Directions:</u> Manually key in any additional directions.		
<u>Assigned To:</u> Parkways			
	Take Photo	<a href="#">Save Changes</a>	

This screen will allow users to edit a Work Order.

The screen behaves the same way as screen 5.3.

The Date field shall change to the current date to show the last time the Work Order was edited.

The Save Changes button will save the Work Order and return the user to screen 3.4.

## 6 Work Reporting

<a href="#">Go Back</a>	Asset Work Reporting	
	D10135	
<u>Work Completed</u>		
Culvert Cleaned (Drop Down List)		
<u>Notes:</u>		
Notes on completed activity. (Manually Entered)		
Add Another Work Item	Take Photo	<a href="#">Finish Work Report</a>

This screen is where users will report the work they have completed on an asset.

The blue box under "Work Completed" shall be clickable and give a drop down list of the types of work prepopulated into the system.

The notes field shall allow the user to type or speak to the device to add notes about the work they completed.

Clicking on "Add Another Work Item" will save the current Work Report and create a new blank one for the user to edit.

Take photo shall allow the user to add photos to the work report.

Finish Work Report will save the report and take the user to screen 3.0 for the current asset.